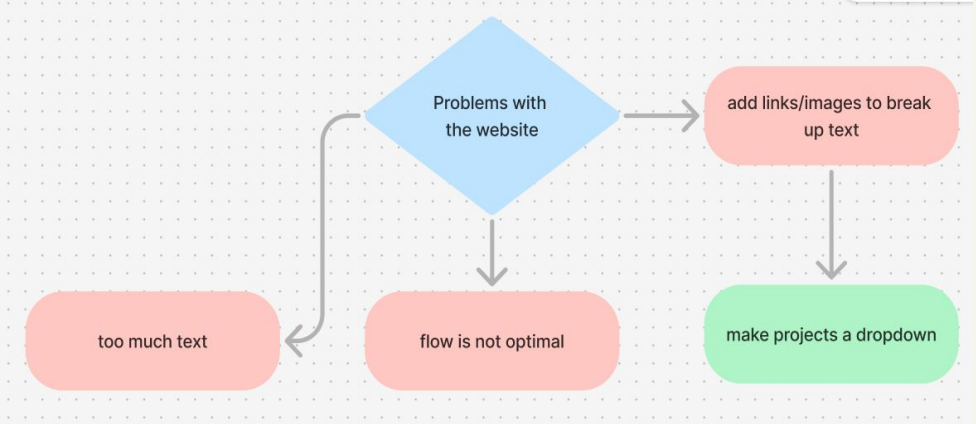
# Combat Robotics @ Cornell

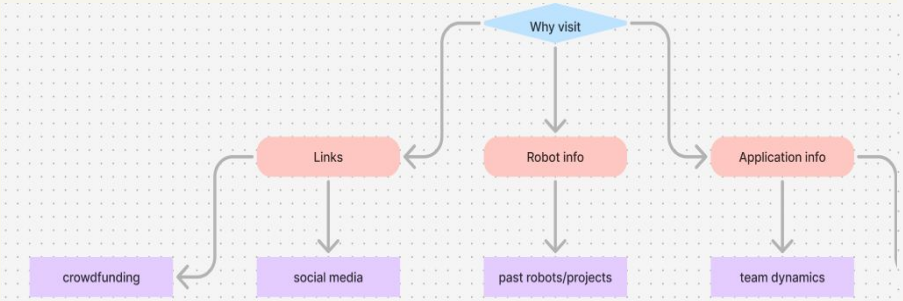
Redesign

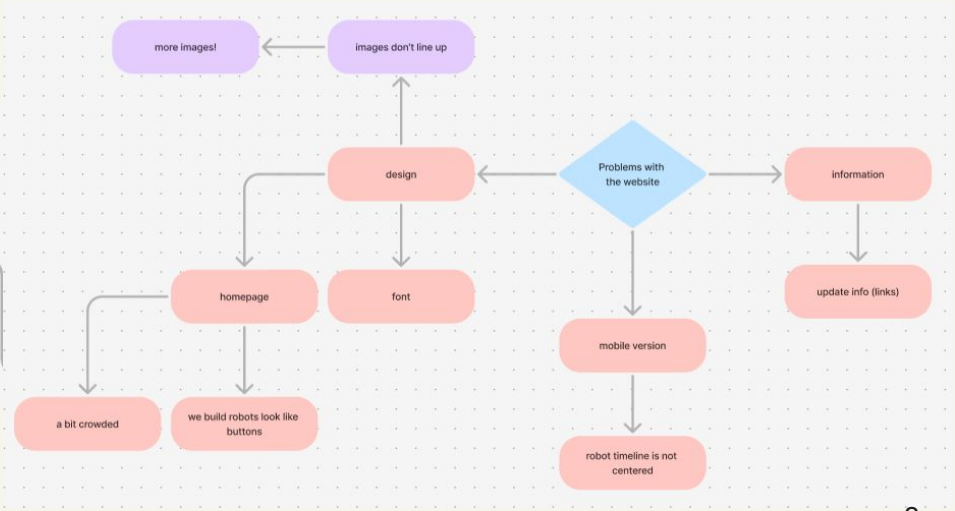
2024-present

# Research

I gathered input on the current website from team members and applicants through a Google Form. After receiving 30+ responses, I compiled them into a FigJam.



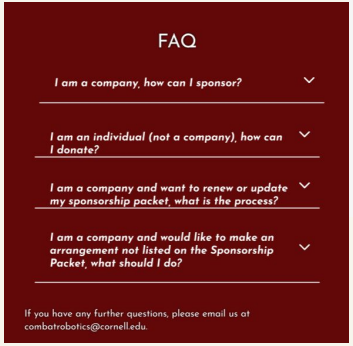



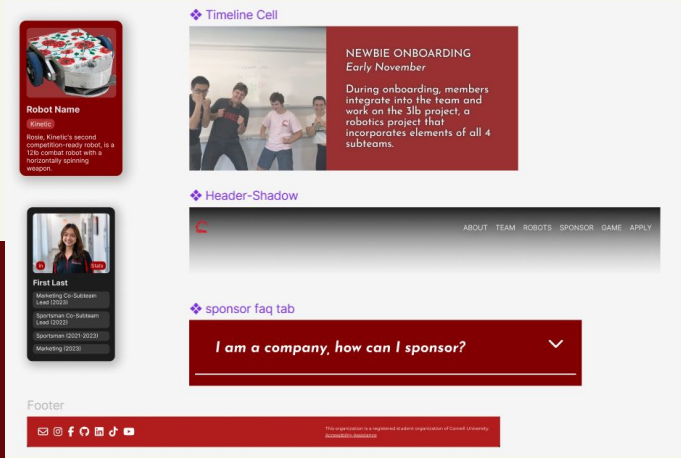
# Theme

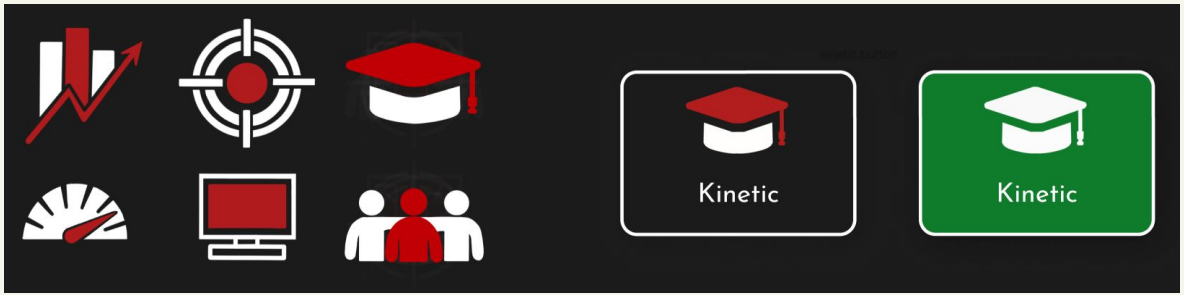
The theme for the website was changed from light to dark mode due to popular demand. Our design motivation was to create a sleeker website while maintaining uniqueness within the website space.

Based on this transition, the color palette was focused on red and black to represent Cornell and the team's uniform, with pinks and whites for accents.

Icons were modernized to be more relevant to subteams and more pleasing to the eye.

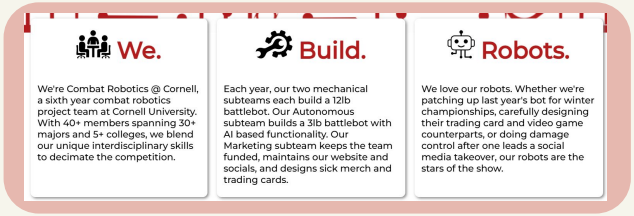


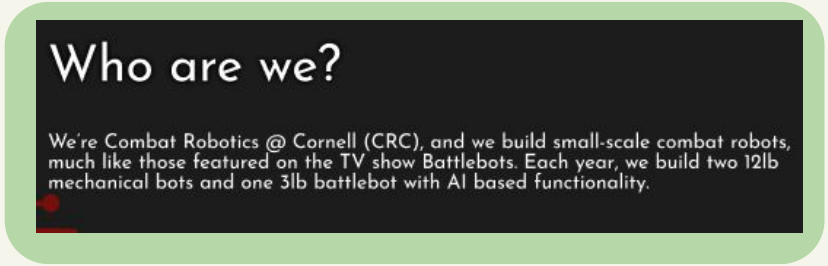



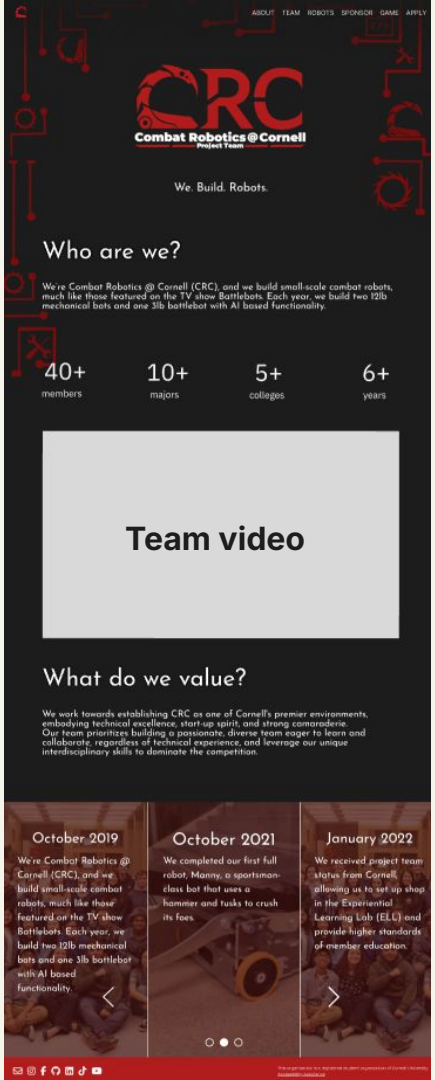




# Home Page

The website redesign was created on Figma. As with the rest of the site, CRC's old website suffered from an excess amount of unnecessary text. This was streamlined in the new design to have high impact statements that kept the user's attention.



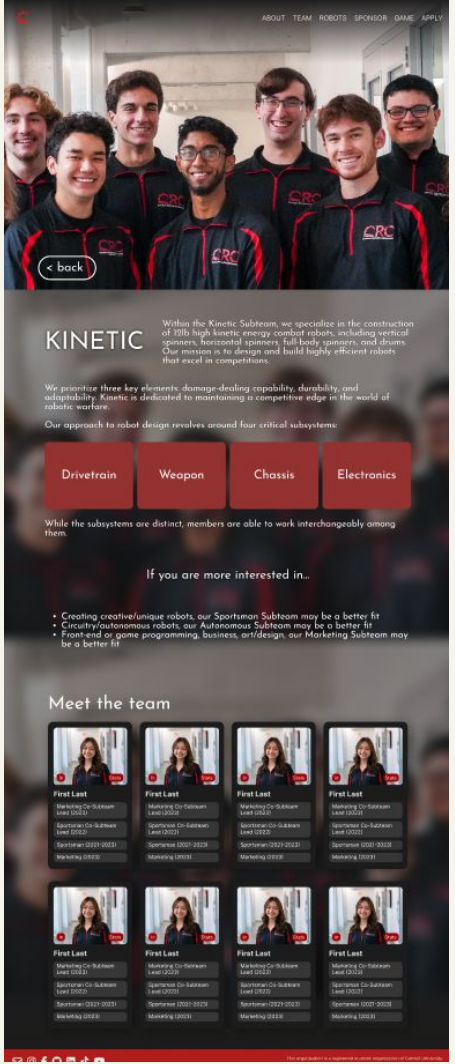
# Subteam Page

The subteam pages were the most overcrowded with text. I simplified this design by abstracting text into buttons, which showed text on hover. This made the page significantly shorter, and made text more optimal for users who were not interested in a specific subsystem.


Our approach to robot design revolves around four critical **subsystems** that all members are in together:

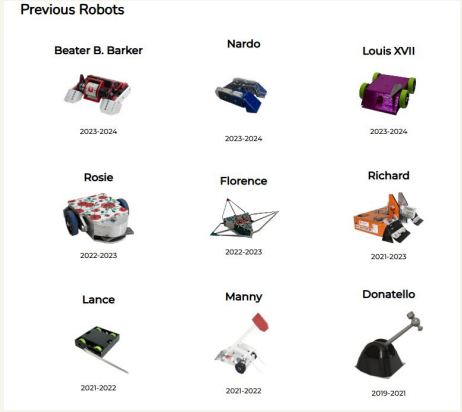
- **Drivetrain**: This encompasses the locomotion system of the robot. Kinetic meticulously selects the drive systems to ensure our robots are agile, responsive, and formidable on the battlefield.
- **Weapon**: This encompasses the attacking method of the robot. Kinetic's arsenal is optimized for maximum impact and high energy spinning to destroy our opponents.
- **Chassis**: This encompasses the shell, armor, and internal structure of the robot. Kinetic engineers these elements to withstand the rigors of intense battles and outlast the competition.
- **Electronics**: This encompasses the motors, ESCs, batteries, power switches, and wires of the robot for RC control. Kinetic ensures that all electronics are built to last through 3-minute matches.

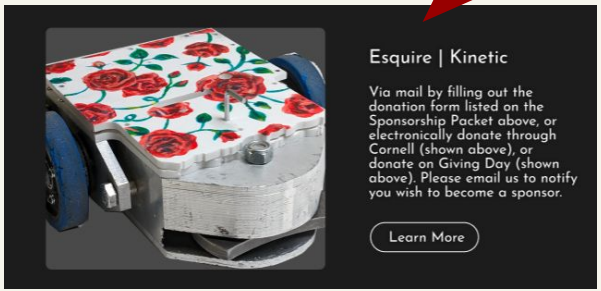
The culmination of these efforts results in a finely tuned, compact robot system that is both reliable and potent

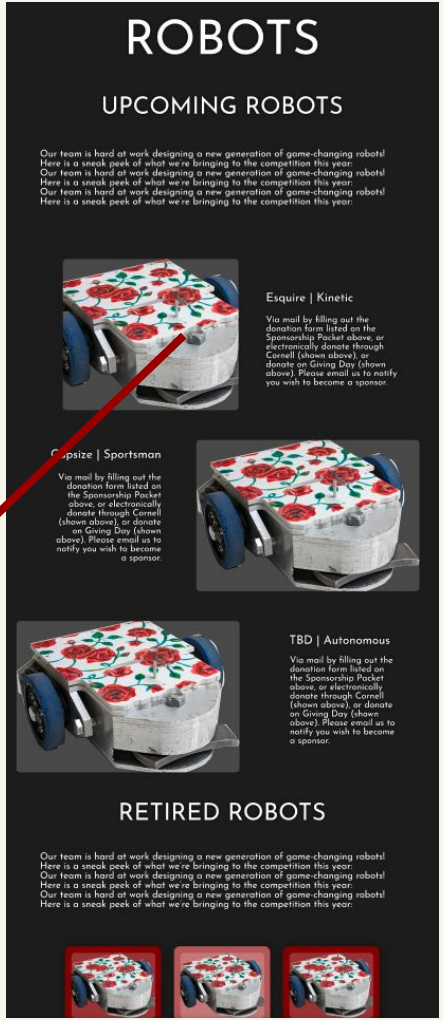


# Robot Navigation

This page contained an archive of the team's past robots. Each robot could be clicked to learn more about it. The design was modified to place a higher emphasis on the newest robots made by the team, as well as upcoming robots for the current year.

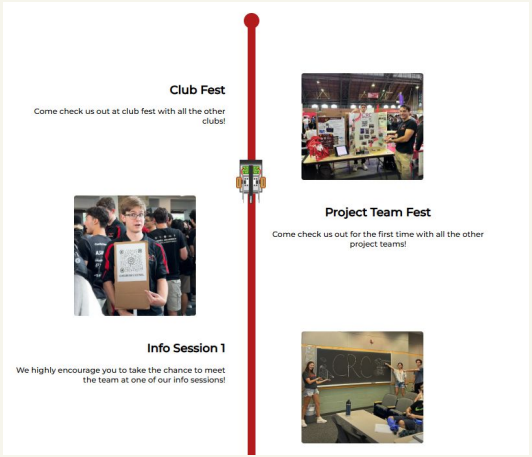


# Recruitment Page

This page contained two timelines describing the recruitment and onboarding process in the team. This made the page very long, so I reduced it to one timeline for the new member experience, and designed a numerical description for onboarding.





# Video Game UI Design

UI Design

2024- 25

# CRSuika

This game was designed as an introduction to game programming in Unity, and thus was a knock off of the popular mobile game *Suika Game*.

The theme was lighthearted, so a color palette of pastels and reds was used to connect with CRC while remaining simplified and easy to understand.

Combat Robotics @ Cornell

Score is kept at the top, and the upcoming robot is shown on the right.


Tiers of robots from small to large were shown on the left.

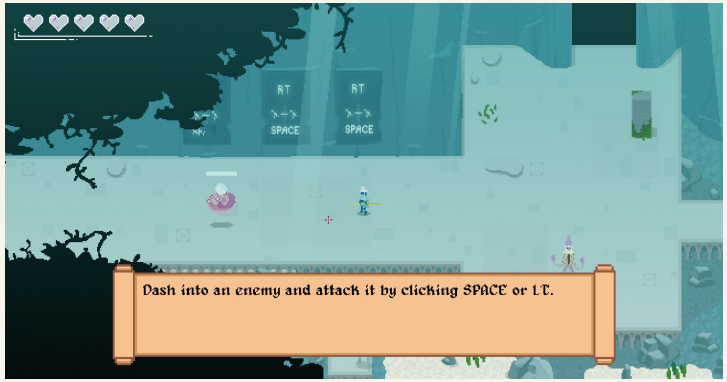
# Seas the Throne

There was not much UI required for this game, as the level select was a hub world and the interface only really needed to show player HP.

The main design in the game was the HP bar, as well as the ammo count (which never exceeded 5). Since this was a bullet hell game, bullet count needed to be close to the player so attention was not diverted, while HP could be more distant.

The settings menu was designed in a similarly minimalist manner, with color changes to indicate selection as this was a controller-focused game.

CS 3152




# Poster Design

Misc. Design

2021-23

# Bodhi Meditation Center

I was a designer for the social media team at the Boston Bodhi Meditation Center, and designed/iterated several posters for their in-person location and social media.